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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,835	02/11/2004	William C. Brunnett	PD-266.00 / M190.147.101	3017

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EXAMINER

COMSTOCK, DAVID C

ART UNIT	PAPER NUMBER
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3733

MAIL DATE	DELIVERY MODE
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02/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,835	Applicant(s) BRUNETT ET AL.	
	Examiner David Comstock	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-139 and 145 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 26-38, 44-59, 65-78, 84-94, 100-110, 116-124, 130-134 and 145 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05 FEB 2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 13-25,39-43,60-64,79-83,95-99,111-115,125-129 and 135-139.

DETAILED ACTION

Oath/Declaration

The oath or declaration filed on 01 October 2007 is accepted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-8, 12, 26, 30, 31, 33, 34 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Etablissements Beaudouin (FR 1,166,884; cited by Applicant).

The '884 reference clearly discloses the claimed invention including the outer tube 8, inner wire 1, cutting tip 3, coupling chuck, housing 12 and rotating journal bearing (see Figs. 1 and 2). The inner wire is a homogenous wire. The outer tube defines curved segments and tapers distally in diameter to the distal end. The bearing is established along a length of the device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 9-11, 27-29, 32, 35-37, 44-59, 65-78, 84-94, 100-110, 116-124, 130-134 and 145 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Etablissements Beaudouin* (FR 1,166,884; cited by Applicant).

The '884 reference discloses the claimed invention except for explicitly describing that the device could be formed from such materials as certain tool steels, hardened and/or polished metals and except for explicitly describing the lubricant. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the device of the '884 reference of such materials as tool steels, hardened and/or polished metals and to utilize grease such as silica thickened grease and/or a hydrophobic grease, as it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. It also would have been obvious: to have provided the dimensions of the device such that the maximum outer diameter of the outer tube is 2 mm and/or constant, the maximum outer diameter of the wire is not more than 0.8 mm, the length of the exposed portion of wire is not greater than 2.54 mm; to have provided the inner wire with a fatigue strength of 75 Kpsi or greater and/or a Rockwell Hardness of 50 HRC or greater; to have provided the lubricant with a viscosity of 100 mm²/s at 40 degrees C or 150-250 mm²/s at 40 degrees C; to have provided the tube with a surface roughness of less than or equal to 20μ inch RMS; to have provided the outer

tube with a stiffness of at least 15 lbf/inch; and so forth, as it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Amendment

The Declaration under 37 CFR 1.132 filed 01 October 2007 is insufficient to overcome the rejection based upon Etablissements Beaudouin (FR 1,166,884; cited by Applicant) as set forth in the last Office action because: Declarant's statement that the wire tested is "akin to the piano wire described in FR '884" (see Declaration, Para. 6) does not prove that the wires have the same or even similar properties--just that they are somehow related or akin to each other. Therefore, any results obtained during Declarant's experimentation are applicable only to the materials that were used under the conditions that were present and cannot be the evidentiary basis for conclusions with respect to other materials. Moreover, *even if* the noted test results were applicable to the applied art, Declarant's conclusion that "one of ordinary skill would search for an entirely different instrument construction" does not flow from the results obtained by Declarant. While consideration of an "entirely different construction" is one avenue a person of ordinary skill in the art would consider, prior to this, simply testing other materials and lubricants would be considered and implemented. Therefore, for at least these reasons, the Declaration is insufficient to overcome the outstanding rejection.

Response to Arguments

Applicant's arguments filed 01 October 2007 have been fully considered but they are not persuasive.

In response to Applicant's argument (see, e.g., Remarks, page 28, lines 3-17) that amended claim 1 now recites that "a rotating journal bearing is established between an outer surface of the inner wire assembly and an entity of a length [sic] of the inner surface...", it is noted that the applied reference still satisfies such a limitation. First, the bearing in '884 is established over the entirety of at least *some* length of the inner surface, as claimed. Thus, the indefinite article "a" renders the apparent purpose of the amendment effectively meaningless. In addition, that there is sufficient clearance for the rotating parts to move freely while still accommodating the lubricant shows that the bearing can be considered to be a journal bearing. That is, the shaft is not contacting the housing, but rather, is rotating on a layer of lubricant. Furthermore, the lubricant is of sufficient viscosity to remain in the bearing during use. Regarding the viscosity of the lubricant, the lubricant disclosed in '884 manifestly and necessarily possesses a viscosity. Moreover, determining the appropriate viscosity of lubricant is so common to the mechanical arts that it goes without saying that viscosity is a recognized result-effective variable. It is a primary consideration when dealing with moving parts. Thus, determining the appropriate viscosity would be obvious, as set forth in the rejection. Similarly, several of the characteristics noted in the claims and corresponding rejection merely involve ordinary skill in the art, and determining the same would have been obvious to allow the device to have different operating properties and profiles and

facilitate use in a wider variety of conditions and situations. Finally, the statements (see Remarks at page 27) that the device of '884 purportedly suffers from a design that is impossible to achieve, and that the device would induce wobbling, and so forth, is simply not supported by any evidence of record and has not been given weight.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Comstock whose telephone number is (571) 272-4710. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DC/

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733